



Figure 1.

Photo of the external view of the proposed of the proposed conference hall.

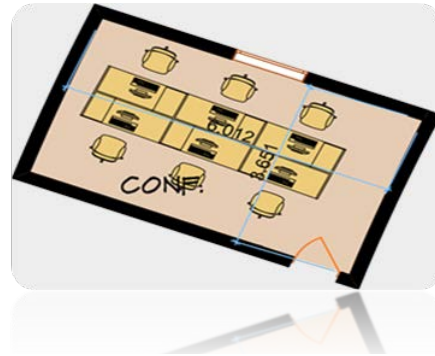


Figure 2.

Plan city hall in Port Harcourt local Government.

Table 1. Conference Room Dimensions

| | |
|------------------|----------|
| Length, m | 6.02m |
| Large, M | 3.65m |
| Maximum height | 3.9 |
| Minimum height | 3.2 |
| Volume, m | 96 |
| Maximum capacity | 6 seated |
| Glass surface | |

CONCLUSIONS

Having conducted a study on the parameters of acoustical performance and considerations of acoustic in a city hall through an analysis of selected spaces like the conference hall, offices and the council chamber through case studies, documenting of research findings and recommendations on improving the present amenities; conclusions from the study have been drawn.

The following values are recommended for maximum acceptance background noise level.

| | |
|-----------------|----------------|
| Conference hall | 40 - 45 dB (A) |
| Offices | 35 - 40 |
| Concept hall | 20 - 25 |

RECOMMENDATIONS

The recommended ceiling height in hall design is between 8m and 12.5m for useful sound reflection by the ceiling.

Proper choice of materials includes three main types of sound absorbent materials with different absorption co-efficient namely, porous absorbents, panel absorbents and resonators.

Proscenium walls, gallery beam surfaces, auditorium back wall, doors and floor finishes should be sound absorbing. In areas where ceilings and walls meet, one or both of them should be sound absorbing to eliminate sound reflection from one of the surfaces to the other.

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